

## **Determination of Public Land (Rangeland) Health for 65052 MESCALERO POINT**

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for the implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Mescalero Point, allotment #65052, meets the Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/Karen Kelleher  
Field Manager

5/25/07  
Date

# Standards of Public Land Health

## Evaluation of 65052 MESCALERO POINT Allotment

### [ 10/15/2006 ]

The Roswell Field Office conducted a Rangeland Health Assessment at one study site within Mescalero Point, allotment #65052. This assessment evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of this study site. Existing monitoring data was incorporated into and in support of this field assessment. A summary of this assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
65052-BM156-C045	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Mescalero Point, allotment #65052. Ten (10) of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with previous data collected on one study location within this allotment were utilized to make rangeland health determinations. This allotment is a "C" custodial category Section 15 due to small amounts of public land present.

This allotment is gradually recovering from recent dry conditions which have impacted the entire Caprock area. Public land encompasses 40 acres/16 hectares within White Tank Pasture which is predominantly private. Retention dams are in place at adjacent points to prevent erosion from shallower complexes sloping from the Caprock which potentially may form gullies caused by runoff from steep and higher lying areas. This lease authorizes 1 animal unit to graze yearlong at 100% public land for 12 AUM's. Most recent data collection was in 2005. Some livestock grazing is occurring but at very conservative levels. Soil series is Ima (Im), fine sandy loam, deep and well-drained, formed in alluvial fans with 1-5 percent slope. Elevation is 4,000 ft/1,212 m to 4,100 ft/1,242 m. This soil occurs in the eastern part of area surveyed on alluvial fans below High Plains breaks. This soil profile is non, moderately, and strongly calcareous in surface, upper and lower layers respectively, and is mildly alkaline throughout. Soil, hydrologic and biotic attributes for most all indicators fell well within normal range of variability rating None to Slight and Slight to Moderate. That with more Moderate departure was bareground with an estimate of 50 to 60 percent. Organic matter has incorporated into soil horizon and has formed an adequate mulch layer for site protection. Gullies have developed along the two-track leading into this site but have no headcuts, nickpoints or bed erosion occurring. Black grama (*Bouteloua eriopoda*), blue grama (*Bouteloua gracilis*), tobosa (*Pleuraphis mutica*), burrograss (*Scleropogon brevifolius*), sideoats (*Bouteloua curtipendula*) and muhley (*Muhlenbergia spp.*) are just some grass species found in generous amounts suggesting more loamy influences. Desert holly (*Perezia spp.*) was observed as well indicating sandy conditions as well. Creosote (*Larrea*

*tridentata*) is the chief brush species and is scattered throughout rating invasive plants Moderate. No encroachment concerns with this shrub or any other exist presently.

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**Wildlife** - Evaluation of integrity of biotic community considered several indicators as attribute indices for this area of interest. Biotic indicators are interrelated with several other indicators, including soil/site stability, hydrologic function, and vegetation. Several indicators are singularly biotic and address the vegetative aspect of the ecological site description, such as functional/structural groups and plant mortality & decadence. In addition to the standard worksheet biotic factors, four specific wildlife indicators and descriptors are included in this evaluation. A unique assemblage of terrestrial species and avifauna can be expected to use the Mescalero Sands ecosystem just adjacent. Important wildlife species and their habitats, such as desert mule deer (*Odocoileus hemionus*), pronghorn (*Antilocapra americana*), plus a variety of game and non-game species were considered in this assessment. This upland site does provide excellent deer habitat with a mix of cover and browse. Very high populations were extrapolated from tracks and sign.

In the professional opinion of Assessment Team, public land within Mescalero Point, allotment #65052, meets the Upland and Biotic Standards. There are no Riparian issues within this allotment, therefore this standard was not addressed. See site notes and recommendations for additional information regarding assessments for ecological sites within this allotment.

**Recommendations:** White Tank Pasture in which the public land is located has adequate watering points that livestock and wildlife use. Dirt tanks and troughs are located throughout and supply this allotment. No brush concerns exist and given the encroachment characteristics of creosote, no real concerns are present. Browse and cover for wildlife is adequate.

Logistically, disposal and/or exchange to acquire land in more contiguous parcels would prove more prudent as with other scattered tracts where accessibility or management may be an issue.



3. 1. 2000



3. 1. 2000

## RFOs Upland and Biotic Standard Assessment Summary Worksheet

### SITE 65052-BM156-C045

Legal Land Desc	SESE 17 0110S 0310E Meridian 23	Acreage	40
Ecosite	070BY055NM SANDY PLAINS CP-2	Photo Taken	Y
Watershed	13060007060 MESCALERO		
Observers	NAVARRO/MOE	Observation Date	03/07/2007
County Soil Survey	NM666 CHAVES SOUTH	Soil Var/Taxad	
Soil Map Unit	Im	Soil Taxon Name	IMA
Texture Class	NM666 FSL	Soil Phase	IMA
Texture Modifier	NM666 FINE SANDY LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	16.19	NOAA Growing Season Precipitation	12.73
NOAA Avg Annual Precipitation	12.37	NOAA Avg Growing Season Precipitation	10.43
Disturbances and Animal Use:	No livestock were observed within this public land acreage or beyond. Deer frequent this area, base of the Caprock.		

### Part 2. Attributes and Indicators

		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground			X		
Comments:	50-60% is the current estimate					
S H	Gullies				X	
Comments:	Roads are located within arroyos, with no active headcuts.					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X

Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:	organic matter is found in soil ped samples					
S H B	Soil Surface Loss or Degradation					X
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff					X
Comments:						
S H B	Compaction Layer					X
Comments:						
B	Functional/Structural Groups					X
Comments:	For this sandy loam upland site, the vegetation is suited for groups occurring under the Caprock, but before sandier influences.					
B	Plant Mortality/Decadence					X
Comments:						
H B	Litter Amount					X
Comments:	10-20% is the current estimate					
B	Annual Production					X
Comments:	800 lbs/ac or kg/ha is the current estimate					
B	Invasive Plants				X	
Comments:	creosote is scattered					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts					X
Comments:	good physical crusts are evident with very few breaks					
B	Wildlife Habitat					X
Comments:	Excellent deer habitat-mix of cover, browse.					
B	Wildlife Populations					X
Comments:	Very high deer pops-Tracks and observations-					
B	Special Status Species Habitat					X
Comments:	Not LPC or SDL habitat-					
B	Special Status Species Populations					X
Comments:	N/A					

### Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	5	4
H	Hydrologic	0	0	1	7	3
B	Biotic	0	0	1	4	8

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate box for each attribute to denote final agreed upon determination by the ID team.

Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	1	10
Biotic		0	1	12

Site Notes: Decreaser grass species are evident here with increasers such as threeawn not on site. A fence is separating part of this public land parcel from the private and up against the Caprock. Juniper trees are also located as part of this upland area situated on the West and North facing slopes. Deer utilize this pasture for browse and cover. Arroyos leading down into the bottom reaches of this pasture also provide cover.